

## **SPECIFICATION**

### **FOR A NONPROVISIONAL UTILITY PATENT APPLICATION**

#### ***TITLE OF INVENTION***

**"System for Providing Localized Content Information Via Personal Communication Devices"**

#### ***CROSS-REFERENCE TO RELATED APPLICATIONS***

This non-provisional utility patent application claims the benefit of a provisional patent application filed by the same company eLocal Network, Inc./070567.00011. The provisional patent application was filed on October 26, 2000 VIA EXPRESS MAIL EF155840585US. The original provisional patent application included the following documents:

1. Express Mailing Certificate
2. Provisional Application for Patent Cover Sheet
3. Fee Transmittal Form
4. Check No. 50000452 for \$75.00 filing fee.
5. Specification (3 pgs.)
6. Informal Drawings (5 sheets)

The Commissioner of Patents (Box Provisional Application, Washington, DC 20381) acknowledged the receipt of above documents with a stamp (Application #: 60/243776, dated 10/26/00).

In the provisional application, the patent was titled: "System for Providing Localized Contact Information Via Wireless Personal Communication Devices". There is a spelling error. The word "Contact" was used instead of the word "Content". The title of the patent should read "System for Providing Localized Content Information Via Wireless Personal Communication Devices". Please correct your records.

As the provisional patent described, this invention is not limited to wireless. Therefore, we would like to remove the word “Wireless” from the title to make it “System for Providing Localized Content Information Via Personal Communication Devices”

## ***BACKGROUND OF THE INVENTION***

**Field of Invention:** Software/hardware/computers/network based “technology infrastructure” solution for local media/information/content deployment.

Traditional local media providers (i.e. newspapers, radio stations, local TV stations, yellow pages, etc.) deployments are built, produced, and deployed on market specific station/office infrastructure (a field or station office in every market covered with local staff). Traditional local media provider infrastructure is built one market at a time. Some new media companies (i.e. Digital Cities, City Search, etc.) have used the same traditional local media infrastructure for new media deployment (i.e. Internet, etc.). Traditional local media providers’ infrastructure is inefficient, non-scalable, and costly to deploy in multiple markets.

This invention, a “System for Providing Localized Content Information Via Wireless Personal Communication Devices”, introduces a technology based (software/hardware/computers/network driven) scalable deployment (“technology infrastructure”) solution of localized media/content to local media users, providers, merchants, etc. The invention provides aggregated, localized, content targeted, enhanced, integrated, and synthesized media/content to innumerable local markets/communities/channels/portals/ information systems/deployments at nationally or internationally defined geographic standards (longitude/latitude, radius from location, user defined irregularly shaped neighborhood/s, community, zip code, postal code, city, province, county, MSA—Metropolitan Statistical Area, state, region, nation, country, or world based), content specific customization, personalization, and market/community size specifications. This system is device, language, and country agnostic. It delivers this solution to multiple platforms (iTV—interactive TV, Internet, wireless, mobile, PDA, telematics) or any device.

This invention creates value by producing: (1) Efficient digital media/content deployment of innumerable and customizable local-2-local (local consumer to local media provider or merchant) channel/portal/ information system deployments for multiple platforms,

(2) efficient (depth and breadth—super content) media and information to users/consumers, (3) efficient and segmented targeting for media providers, advertisers, users, and merchants, (4) cross platform personalization of media and information (efficient multiple platform connectivity by same user to same information—anytime, anyplace, anydevice connectivity), (5) efficient cross platform communication (i.e. audiovisual chat from an interactive TV user to wireless/mobile device user), (6) efficient integration of add-on applications, tools, components, and webservices for personalization (agent applications), customization, electronic commerce, online transactions, communication (email, chat, and etc.).

### ***BRIEF SUMMARY OF THE INVENTION***

This invention is a software/hardware/computers/network engine that (1) aggregates content databases with heterogeneous format, (2) stores and manages the data on a network of one or more computers (servers), (3) transforms and enhances the data into a universally accepted/adopted homogeneous format/standard (i.e. XML), (4) combines, stores, and manages transformed homogeneous data into a large virtual database on a network of one or more computers, (5) localizes the data by appending geographic coding (longitude/ latitude, community, zip code, postal code, city, province, county, MSA—Metropolitan Statistical Area, state, region, nation, country, or world based), (6) Integrates and synthesizes localized and content targeted data based on a user request specifications for a specific device, and (7) generates a style sheet that exposes the appropriate data to the appropriate device with the appropriate design.

This invention provides enhanced local information for more than 31,000 communities nationwide. The invention aggregates national databases, indexes them geographically, and delivers the information to multiple platforms including cable, wireless, and the Internet.

This invention is not a destination Web site. The invention is a local information engine licensed to cable television, mobile wireless, and Internet Website companies.

### ***BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING***

There are 2 sets of drawings attached to this application.

The first set of drawing is made-up of 2 pages and is titled “Proprietary Technologies”. It shows a drawing of the entire system identifying the components that built with this invention’s proprietary technologies.

1. **Universal Connectors:** Content Aggregation Services
2. **Universalization System:** Heterogeneous Data Transformation Services
3. **Localization Objects:** Localization Objects/Templates
4. **Target-Device Transformation:** Target Device Analysis Objects/Stylesheet Generator.

The second set of drawings is made-up of 5 pages. It is a copy of original drawing documents submitted with the provisional application referenced above. Here is an explanation of the five pages:

1. **Proprietary Segments (Breakdown)/Page One: This is an overall invention system description showing the main proprietary technology components.**
2. **Proprietary Segments (A)/Page Two: Content Aggregation Services**

*Content Aggregation services* are a collection of proprietary libraries and applications developed for the Microsoft Windows 2000 operating system that actively communicate with the remote services of authorized data providers to gather updated information in a wide variety of data storage formats.

3. **Proprietary Segments (B)/Page Three: Heterogeneous Data Transformations Services**

*Heterogeneous Data Transformations Services* leverage the Microsoft SQL Server 2000 Data Transformation Services (DTS) as a collection of “packages” that update the various clusters of Microsoft SQL Server 2000 datastores in real-time based on data transferred via the *Content Aggregation Services*. These DTS packages “wrap around” and “activate” proprietary business objects that contain transformation logic beyond the capabilities of DTS, such as accessing remote registries and transferring data via File Transfer Protocol (FTP).

#### **4. Proprietary Segments (C)/Page Four: Localization Objects**

*Localization Objects* are a collection of proprietary libraries, housed in Microsoft COM+ Applications, that leverage a set of proprietary *Localization Templates* to generate geography-specific data enhancements, such as postal codes, longitudes and latitudes, Federal Information Processing Standards (FIPS) codes, etc. The *Localization Objects* also determine, via the *Localization Templates*, how a given web service is exposed to a partner for reuse.

#### **Proprietary Segments (C): Localization Templates**

*Localization Templates* are an optional collection of proprietary libraries and applications that interrogate and identify a requesting (target) device to determine the specific limitations and native support of the target in order to reply with an appropriate, properly formatted response, such as sending Hypertext Markup Language (HTML) data to a web browser, or Wireless Markup Language (WML) data to a cell phone.

#### **5. Proprietary Segments (D)/Page Five: Target Device Analysis Objects**

*Target Device Analysis Objects* are an optional collection of proprietary libraries and applications and interrogate and identify a requesting (target) device to determine the specific limitations and native support of the target in order to reply with an appropriate properly formatted response, such as sending Hypertext Markup Language (HTML) data to a web browser, or Wireless Markup Language (WML) data to a cell phone.

#### **Proprietary Segments (D): Stylesheet Generator**

The *Stylesheet Generator* is an optional application that works in tandem with the *Target device Analysis Objects* to build the visual enhancement needed to show the contents of a web service on a given device. The *Stylesheet Generator* can also be managed by a human resource to further manipulate the physical “look and feel” or design that a target device would display.

### ***DETAILED DESCRIPTION OF THE INVENTION***

This invention is a software/hardware/computers/network system comprising: A “technology infrastructure” network based software/hardware system deployment solution that is

comprised of one or more computers/servers (hardware), one or more operating systems (software), one or more applications/servers (software), and proprietary software components that allow for deployment of innumerable scalable localized and content targeted channels/portals/ information systems to multiple platforms (interactive TV, Internet, wireless, mobile, PDA, telematics, etc.) and devices based on user/provider specifications. A user requesting localized and targeted content to be delivered to a specific platform or device with clear instructions defining the geographic, content, platform, device, stylesheet, and design specifications initiates a request/query/inquiry that interrogates the system (invention). The system responds with a data stream that provides the localized and targeted content data to the requesting device.

The invention provides enhanced local information for more than 31,000 communities nationwide. The invention aggregates national databases, indexes them geographically, and delivers the information to multiple platforms including cable, wireless, and the Internet.

The invention is not a destination Web site. The invention is a local information engine licensed to cable television, mobile wireless, and Internet Website companies.

Research conducted by Jupiter Communications indicates that average Americans spend 80% of their time and disposable income on products and services within a 25-mile radius of their homes. Traditionally, local information and advertising have been distributed through local television, newspapers, magazines, and yellow page directories. For decades, these companies have dominated this \$214 billion local advertising market by providing effective ways for local buyers and sellers to find each other. New breakthroughs in information technology have created a window of opportunity to new players to enter this arena.

Currently, there are three industries poised to capture this market by delivering this information electronically:

**Cable**

Interactive digital television will ultimately reach over 70 million households and the cable industry is poised to capture the lion's share of the local advertising market. To date, every prototype of the next generation of interactive television (iTV) includes a "LOCAL" button clearly situated on the opening page. With first and second generation digital set-top boxes in full production and distribution, the search for a scalable, local, interactive information source has

intensified with all major cable operators actively seeking local content and technology partners that can meet their needs.

#### **Wireless Devices**

Ovum research has predicted that in 2000, over 72 million wireless devices will be shipped in the US. Local information and services continue to rank as the most requested category among users of wireless devices. Wireless providers are scrambling to aggregate relevant local content, but are discovering that databases with relevant local information are not standardized. It is also difficult to find applications that can be easily accessed by these limited devices.

#### **Internet Portals**

According to recent research conducted by Cyber Dialogue, local information now ranks as the sixth most accessed category among end users of the World Wide Web. The Kelsey group has proven that Internet companies choosing to integrate local and localization features are boosting their traffic and user loyalty by 30%. The demand for seamless integration of local information and services has never been stronger.

### **Proprietary Segments (Breakdown)**

#### **Proprietary Segments (A): Content Aggregation Services**

*Content Aggregation services* are a collection of proprietary libraries and applications developed for the Microsoft Windows 2000 operating system that actively communicate with the remote services of authorized data providers to gather updated information in a wide variety of data storage formats.

#### **Proprietary Segments (B): Heterogeneous Data Transformations Services**

*Heterogeneous Data Transformations Services* leverage the Microsoft SQL Server 2000 Data Transformation Services (DTS) as a collection of “packages” that update the various clusters of Microsoft SQL Server 2000 datastores in real-time based on data transferred via the *Content Aggregation Services*. These DTS packages “wrap around” and “activate” proprietary business objects that contain transformation logic beyond the capabilities of DTS, such as accessing remote registries and transferring data via File Transfer Protocol (FTP).

#### **Proprietary Segments (C): Localization Objects**